Application Ser. No.: 10/562,369

In Response to Final Office Action Mailed February 19, 2010

Page 14 of 17

REMARKS

Claims 1-27, 29, 31-33, and 53-65 are pending. Claims 1, 4, 7-9, 11-14, and 20 have been amended. Claim 21-23, 29, 31-33, and 53-65 have been previously presented. Claims 2, 3, 5, 6, 10, 15-19, and 24-27 are original. Claims 28, 30, and 34-52 have been canceled. No new matter has been introduced by the amendment

1. Claim Rejections under 35 U.S.C. § 103(a)

Claims 1-8 and 53-65 have been rejected under 35 U.S.C. §103(a) over McEntee et al. (U.S. Pat. Pub. No. 2004/0050701) in view of Paolini et al. (U.S. Pat. Pub. No. 2002/0131147). Claims 9-27, 29, and 31-33 have been rejected under 35 U.S.C. §103(a) over McEntee in view of Montgomery (U.S. Pat. No. 6,280,595), and further in view of Paolini. The Applicant respectfully traverses the rejection.

Paolini could not be combined with McEntee because Paolini is not analogous prior art. The method of the present invention uses an emulsion "including an electrically insulative non-aqueous continuous phase and an electrically charged discontinuous phase". The Applicant hereby submits a piece of evidence, an article published by TriLink BioTechnologies, Inc. in 1999 in its Technical Bulletin TL001, which shows that water is a common contaminate in custom DNA synthesis (see sections 2 and 3). Further, existing water could not be easily eliminated from such a system (see section 3). Because the present invention involves an emulsion inlouding an electrically insulative non-aqueous continuous phase for processes such as DNA synthesis, a person having ordinary skill in the art would not look into an aqueous system for teaching, such as Paolini, which presents known disadvantages in the field of the Applicant's endeavor, which disadvantages the instant claims expressly intend to overcome by requiring "the

Application Ser. No.: 10/562,369

In Response to Final Office Action Mailed February 19, 2010

Page 15 of 17

emulsion including an electrically insulative non-aqueous continuous phase" (emphasis added).

Further, McEntee in view of Paolini do not teach all the claim limitations as recited in amended independent claims 1, 4, 7, and 9. As argued in the prior responses, McEntee and Paolini do not teach or suggest any emulsion including an electrically insulative non-aqueous continuous phase, the emulsion comprising a surfactant not significantly reducing the volume resistivity of the continuous phase. as recited in amended independent claims 1, 4, 7, and 9. The Examiner has conceded that McEntee does not teach about an emulsion including an electrically insulative continuous phase, the emulsion comprising a surfactant not significantly reducing the volume resistivity of the continuous phase (Office Action, pages 4 and 19). Further, as the Examiner has conceded, the continuous phase as disclosed in Paolini is aqueous so obviously the surfactant cannot be considered to not affect the volume resistivity because an aqueous phase is not electrically insulative in the first place. Put in another way, the volume resistivity in aqueous systems would be low anyway, either in the presence or absence of the surfactant. Thus, since Paolini uses aqueous systems, this reference does not teach or suggest any surfactant that would not significantly reduce the volume resistivity of the continuous phase that is electrically insulative and non-aqueous, as required by amended independent claims 1, 4, 7, and 9. In other words, the mere effect, if any, of a surfactant upon the volume resistivity of a continuous phase in an aqueous system teaches or suggests nothing about possible effect of this surfactant upon a continuous phase in an electrically insulative and non-aqueous system. Montgomery does not overcome these deficiencies of McEntee and Paolini. The Applicant incorporates herein these arguments from the prior responses.

In view of the above, the Applicant respectfully submits that McEntee in view of Paolini would not render amended independent claims 1, 4 and 7 obvious, and

Application Ser. No.: 10/562,369

In Response to Final Office Action Mailed February 19, 2010

Page 16 of 17

that McEntee in view of Montgomery and further in view of Paolini would not render amended independent claim 9 obvious. Accordingly, the rejection of amended independent claims 1, 4, 7, and 9 has been overcome and should be withdrawn.

Moreover, the dependent claims are patentable since they depend from the patentable amended independent claims 1, 4, 7, and 9.

2. Conclusion

Based on the above, the Applicant respectfully submits that the claims are in condition for allowance. The Examiner is kindly invited to contact the undersigned attorney to expedite allowance.

Respectfully submitted.

Dated: September 2, 2010

Yuezhong Feng/ Yuezhong Feng, Ph.D. Registration 58,657 Attorney for Applicant

BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610 (312) 321-4200